

## CLAIMS

What is claimed is:

1. An external counterpulsation apparatus for treating a patient and providing patient information, comprising:
  - a plurality of inflatable devices adapted to be received about the lower extremities of the patient;
  - a source of compressed fluid in fluid communication with said inflatable devices;
  - a fluid distribution assembly interconnected with said inflatable devices and said source of compressed fluid for distributing compressed fluid from said source of compressed fluid to said inflatable devices; and
  - a data structure for storing patient information; and
  - a computing device in communication with said fluid distribution assembly and said data structure and receiving said patient information.
2. An apparatus according to claim 1, wherein said data structure is a patient data structure for storing demographic information for the patient receiving treatment.
3. An apparatus according to claim 2, wherein said computing device stores said demographic information in said patient data structure.

4. An apparatus according to claim 2, wherein said patient demographic information includes at least one of a patient identifier, a patient name, and patient medical data.

5. An apparatus according to claim 1, wherein said data structure is a patient treatment data structure for storing treatment information for the patient receiving treatment.

6. An apparatus according to claim 5, wherein said computing device stores said treatment information in said patient treatment data structure.

7. An apparatus according to claim 5, wherein said patient treatment information includes at least one of ECG data, ECG wave form, blood pressure data, blood flow data, heart rate data, treatment duration and inflation/deflation cycle data.

8. An apparatus according to claim 1, wherein said computing device communicates said patient information over a communication link to a second computing device.

9. An apparatus according to claim 1, wherein said computing device controls inflation and deflation of said inflatable devices.

10. A computer-implemented system for recording patient information for a patient who is receiving treatment from an external counterpulsation device, comprising:

a patient treatment data structure for storing treatment information for one or more patients receiving treatment; and

a computing device connected to the external counterpulsation device for controlling operation of the external counterpulsation device and receiving said treatment information.

11. The computer-implemented system of claim 10, wherein said computing device stores said treatment information in said patient treatment data structure.

12. The computer-implemented system of claim 10, further comprising a patient data structure for storing demographic information for one or more patients receiving treatment.

13. The computer-implemented system of claim 12, wherein said computing device receives said patient demographic information and stores said demographic information in said patient data structure.

14. The computer-implemented system of claim 13, wherein said patient demographic information includes at least one of a patient identifier, a patient name, and patient medical data.

15. The computer-implemented system of claim 12, wherein said computing device is adapted to communicate said patient demographic information over a communication link to a second computing device.

16. The computer-implemented system of claim 10, wherein the patient treatment information includes at least one of ECG data from the patient, blood pressure data from the patient, heart rate data from the patient and inflation/deflation cycle data associated with the external counterpulsation device.

17. The computer-implemented system of claim 10, wherein said computing device is adapted to communicate said patient treatment information over a communication link to a second computing device.

18. The computer-implemented system of claim 10, wherein said external counterpulsation device includes an inflatable device adapted to be received about the lower extremities of the patient and a fluid distribution assembly in fluid communication with said inflatable device for distributing compressed fluid to said inflatable device, said computing device controlling distribution of said compressed fluid to said inflatable device.

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19. A system for treating a patient and for recording patient information, comprising:

an external counterpulsation device;

a patient treatment data structure for storing treatment information for one or more patients receiving treatment; and

a computing device connected to the external counterpulsation device for controlling operation of the external counterpulsation device and receiving said treatment information.

20. The system according to claim 19, wherein said external counterpulsation device includes a plurality of inflatable devices adapted to be received about the lower extremities of the patient, a source of compressed fluid in fluid communication with said inflatable devices, and a fluid distribution assembly interconnected with said inflatable devices and said source of compressed fluid for distributing compressed fluid from said source of compressed fluid to said inflatable devices.

21. The computer-implemented system of claim 19, further comprising a patient data structure for storing demographic information for one or more patients receiving treatment.

22. The computer-implemented system of claim 21, wherein said computing device receives said patient demographic information and stores said demographic information in said patient data structure.

23. The computer-implemented system of claim 22, wherein said patient demographic information includes at least one of a patient identifier, a patient name, and patient medical data.

24. The computer-implemented system of claim 21, wherein said computing device is adapted to communicate said patient demographic information over a communication link to a second computing device.

25. The computer-implemented system of claim 19, wherein the patient treatment information includes at least one of ECG data from the patient, blood pressure data from the patient, heart rate data from the patient and inflation/deflation cycle data associated with the external counterpulsation device.

26. The computer-implemented system of claim 19, wherein said computing device is adapted to communicate said patient treatment information over a communication link to a second computing device.

27. A computer implemented system for treating a patient and recording patient information, comprising:

an external counterpulsation device including an inflation/deflation valve and an inflatable device;

a computing device connected to the external counterpulsation device for controlling operation of the external counterpulsation device through each inflation/deflation cycle, receiving treatment information, and outputting external counterpulsation device operation information; and

an output device connected to the computing device for displaying said treatment information and said external counterpulsation device operation information.

28. The computer implemented system of claim 27, wherein said treatment information includes at least one of patient demographic information, patient treatment information, and treatment site information.

29. The computer implemented system of claim 27, wherein said treatment information includes patient ECG data and inflation/deflation data.

30. The computer implemented system of claim 29, wherein said inflation/deflation data includes indicating inflation and deflation of said inflatable device.

31. The computer implemented system of claim 29, wherein said inflation/deflation data includes a timing bar for each inflation/deflation cycle, a leading edge of said timing bar corresponding to the initiation of deflation and a trailing edge of said timing bar corresponding to the initiation of deflation.

32. The computer implemented system of claim 31, wherein the timing bar further includes a trigger signal indicating a time at which each inflation/deflation cycle is triggered.

33. The computer implemented system of claim 30, wherein said inflation/deflation data includes a timing marker indicating inflation and deflation of the inflatable devices in relation to an ECG signal.

34. The computer implemented system of claim 33, wherein said timing marker is superimposed on an ECG signal to indicate inflation and deflation in relation to a QRS wave.

35. The computer implemented system of claim 33, wherein the timing marker includes high frequency noise superimposed on the ECG signal.

36. The computer implemented system of claim 27, wherein said treatment information includes at least one of ECG data, ECG waveform, applied pressure data, plethysmograph data, inflation time, deflation time, and cumulative treatment time.